



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,794	04/02/2004	Chiaki Hamada	119334	9940
25944	7590	12/29/2005		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER BURCH, MELODY M	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/815,794	Applicant(s) HAMADA ET AL.	
	Examiner Melody M. Burch	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 7/5/05 & 10/3/05.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6338017 to Kato et al

Re: claim 1. Kato et al. show in figures 1 and 2 a device for controlling braking force of a vehicle having front and rear wheels FR, RR, FL, RL and braking force generating apparatuses shown in the area of elements 21-24 provided for each of the wheels, the device executing braking force distribution control through restricting the increase of the braking force on the rear wheels, generated by the braking force generating apparatus of the rear wheels, for providing a braking force distribution among the front and rear wheels, biased to the front wheels, under a predetermined condition, wherein the device controls the braking force generating apparatuses of the front wheels to increment braking force generated on the front wheel, depending upon a restricted amount of the braking force on the rear wheel during execution of the braking force distribution as disclosed in col. 6 lines 4-10.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of JP-07117655 (JP'655).

Re: claims 2, 4-9, 11, 12, and 12. Kato et al. show in figure 1 and 2 the device comprising a master cylinder 11 receiving a braking action by a driver of the vehicle via element 14 and providing an operational fluid pressure corresponding to the braking action to wheel cylinders 21-24 in the braking force generating apparatuses, wherein the increase of the braking force on the rear wheel is restricted by restricting the increase of pressure in the wheel cylinders of the rear wheels as disclosed in col. 6 lines 4-10.

Kato et al. fail to specifically disclose that the front wheel braking force is incremented by determining an increment in the wheel cylinders of the front wheels based upon the braking action by the driver, the pressures in the wheel cylinders of the rear wheel and parameters each indicating braking performances of the respective braking force generating apparatuses of the front and rear wheels, and incrementing pressure in the front wheel cylinders based upon the increment.

JP'655 teaches in lines 1-4 of the Purpose section of the English abstract the limitation of determining an increment in the wheel cylinders of the front wheels based upon the braking action by the driver, the pressures in the wheel cylinders of the rear wheel and parameters each indicating braking performances of the respective braking

force generating apparatuses of the front and rear wheels, and incrementing pressure in the front wheel cylinders based upon the increment.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the brake control of Kato et al. to have included control actions taking place on the front wheel side of the vehicle, as taught by JP'655, in order to provide a means of improving the stability of the vehicle.

Re: claim 3. A sensor monitoring vehicle speed is suggested by the calculation of  $V_{so}$  or estimated vehicle speed in box 105 in figure 3 the parameters indicating braking performances or stability which decreases as the vehicle speed increases.

Re: claim 10. Kato et al., as modified, fail to specifically recite that the braking force increment on the front wheels are substantially equal to the restricted amount of the braking force on the rear wheels. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the braking force increment to have been equal to the restricted amount of the braking force since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d, 272, 205 USPQ 215 (CCPA 1980).

### ***Response to Arguments***

5. Applicant's arguments filed 7/5/05 have been fully considered but they are not persuasive.

Applicant argued that Kato fails to disclose or suggest the limitation wherein a braking control system controls braking force generating apparatuses of the front

wheels to increment a front wheel braking force based on a restricted amount of braking force on the rear wheels during execution of the braking force distribution.

Examiner notes that Kato discloses the restricted amount of braking on the rear wheels in col. 6 lines 8-9. Examiner also notes that braking of the rear wheels results in braking of the front wheels due to the connection of the rear wheels with the front wheels via the vehicle chassis. Thus, an increase of braking of the rear wheels results in an increase of braking of the front wheels to ultimately result in deceleration of the entire vehicle. Thus, as broadly recited, Kato describes the invention.

Applicant further argues that Kato fails to include the limitation wherein a braking force increment in the front wheels is beyond a braking force increase corresponding to the braking action of a driver (detected by a detector). Examiner notes that it is not Kato alone that teaches the claimed recitation, but Kato in view of JP'655. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Accordingly, the rejections have been maintained.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/815,794

Page 7

Art Unit: 3683

mmb

December 27, 2005

*Melody M. Burch*  
**Melody M. Burch**  
**Primary Examiner**  
**Art Unit 3683**

*12/27/05*